

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,786	01/23/2006	Thomas Bleiner	66434-020	3055
25269 7590 09/17/2007 DYKEMA GOSSETT PLLC FRANKLIN SQUARE, THIRD FLOOR WEST			EXAMINER	
			CHOI, JACOB Y	
1300 I STREET WASHINGTO			ART UNIT PAPER NUMBER	
	,		2885	
			MAIL DATE	DELIVERY MODE
			09/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

			TH
	Application No.	Applicant(s)	
	10/519,786	BLEINER, THOMAS	
Office Action Summary	Examiner	Art Unit	
	Jacob Y. Choi	2885	
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet w	vith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 1.136(a). In no event, however, may a nd will apply and will expire SIX (6) MO ute, cause the application to become a	ICATION. It reply be timely filed INTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 23	January 2006.		
	nis action is non-final.		
3) Since this application is in condition for allow	ance except for formal ma	tters, prosecution as to the merits is	
closed in accordance with the practice under	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.	
Disposition of Claims			
4) ☐ Claim(s) 10-14 is/are pending in the applicat 4a) Of the above claim(s) is/are withdr 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 10-14 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.		
Application Papers			
9) The specification is objected to by the Exami	ner.		
10)⊠ The drawing(s) filed on 29 December 2004 is	a/are: a)⊠ accepted or b)[objected to by the Examiner.	
Applicant may not request that any objection to the	ne drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the			
Priority under 35 U.S.C. § 119			
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a lie	nts have been received. nts have been received in iority documents have bee eau (PCT Rule 17.2(a)).	Application No n received in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 29 December 2004.	Paper No	Summary (PTO-413) o(s)/Mail Date Informal Patent Application	

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on December 29, 2004 was considered by the examiner.

Note: The portion of the information disclosure statement filed December 29, 2004 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance (e.g., DE 4012120), as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Specification

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Response to Amendment

4. Examiner acknowledges that the applicant has filed a preliminary amendment on September 12, 2005 canceling claims 1-9 and newly adding claims 10-14. Currently, claims 10-14 are pending in the application.

Application/Control Number: 10/519,786

Art Unit: 2885

Claim Objections

5. Claim 1 is objected to because of the following informalities: the term "its" is considered indefinite since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Note: Claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Things clearly shown in reference patent drawing qualify as prior art features, even though unexplained by the specification. *In re Mraz*, 173 USPQ 25 (CCPA 1972).

Although ... a means for performing a specified function is an acceptable definition of an element or subcombination of a combination and such a means shall be construed to cover corresponding structure and equivalents thereof, function must be specified and thus would be capable of a determination of structural equivalent thereof; structureless terms without a function specified therefor affords no basis for judging whether a structure different from that disclosed by applicant would be equivalent thereof; identity of function is only basis for such equivalency; only where structureless terms specify a function performed by corresponding element of invention does section 112 sanction claiming of that which otherwise would be a self contradiction of purporting to define a structure by use of structureless terms. *Ex parte Klumb*, 159 USPQ 694.

7. Claims **10-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pederson (USPN 6,547,410).

Regarding claim **10**, Pederson discloses at least one support element (e.g., 780) fitted onto a vehicle (e.g., Figures 61-62), at least one revolving element (e.g., 804, 806,

Page 3

Art Unit: 2885

810) arranged on the support element (e.g., Figures 65-66) for rotation about a substantially vertical axis (e.g., 818, 822, 816, 815, 820), drive means (e.g., 794) acting on the revolving element to promote rotation thereof about the rotation axis (e.g., column 46, lines 45-55; "... the housing enclosure 780 is preferably located a motor 794 having a worm gear 796 engaged to a shaft 798. Engagement of motor 794 rotates shaft 798 in turn rotating worm gear 796. The motor 794 is preferably electrically coupled to the electrical system and/or controller 50 for the emergency vehicle"), one or more optical signaling elements (e.g., 786) associated with the revolving element (e.g., 804, 806, 810) and electrically connected to an electric power source for illuminating them (e.g., columns 46-47, lines 55-10; "... If rotation of the first alley light 800 is desired, then gear 804 may include a receiving slot 792 to provide electrical connection and power to the LED light source 784 for provision of light"), each of the optical signaling elements comprising light generators/emitters (e.g., 786), wherein the revolving element (e.g., 804, 806, 810) comprises a cylindrical body (e.g., Figures 4-5, 12) coaxial with the rotation axis and housing (e.g., Figure 64, 780) internally thereof the one or more light generators/emitters (e.g., 786), the light generators/emitters being arranged in a respective seat (e.g., columns 46-47, lines 55-10; "... one or more LED's 786 which are preferably each positioned within a culminator reflector 802 for reflection") with emission hole (e.g., 802; Figures 31-32) coaxial therewith, formed on the side surface of the cylindrical body (e.g., Figures 4, 5, 12, 51, 66), each of the seats (e.g., 802) and the respective emission holes having a respective longitudinal axis inclined with respect to the rotation axis of the cylindrical body (e.g., columns 46-47,

Page 5

Art Unit: 2885

lines 55-10; "... first alley light 800 is preferably formed of one or more LED's 786 which are preferably each positioned within a culminator reflector 802 for reflection and maximization of light transmission along a desired path of illumination"), the drive means (e.g., 794) being so coupled to the revolving element (e.g., 804, 806, 810) to promote the rotation of the body about the rotation axis at the sufficient rotational speed to form a pattern of light (e.g., column 35-65; "... provide any desired color, pattern, combination of patterns, and/or types of light signals including, but not necessarily limited to, flashing, stroboscopic, modulated, variable, pulsating, oscillating, alternating, rotating, illumination of arrows, and/or other types of variable light signals or combination of light signals as earlier described"), the pattern of light having its base directed towards (e.g., Figure 66; 784) the plane of travel of the vehicle (e.g., columns 46-47, lines 55-10; "... a culminator reflector 802 for reflection and maximization of light transmission along a desired path of illumination") and its vertex arranged on the rotation axis (e.g., Figures 61-62).

Pederson discloses the claimed invention except for the details of the laser light generators/emitters nor specifies the cone of light pattern in such a manner to envelope the body of the vehicle.

First, It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize well-known light source such as laser diode instead of the conventional light emitting diode (LED), since the examiner takes Official Notice of the equivalence of laser diode and light emitting diode for their use in the vehicle emergency lighting and the selection of any of these known equivalents would be within

Art Unit: 2885

the level of ordinary skill in the art. Also, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design variation. *In re Leshin*, 125 USPQ 416.

Second, it would have been obvious to one having ordinary skill in the art at the time the invention was made to specify the lighting pattern of the emergency lighting system to be cone shaped. Pederson suggest that columns 46-47, lines 55-10; "... a culminator reflector 802 for reflection and maximization of light transmission along a desired path of illumination" and column 35-65; "... provide any desired color, pattern, combination of patterns, and/or types of light signals including, but not necessarily limited to, flashing, stroboscopic, modulated, variable, pulsating, oscillating, alternating, rotating, illumination of arrows, and/or other types of variable light signals or combination of light signals as earlier described". The desirability to modify the pattern of the light is clearly suggested by the prior art reference. The cone of light pattern in such a manner to envelope the body of the vehicle seem to be obvious, while providing an alternative ways to alert other drivers. Thus, the modification is obvious at the time the invention was made.

Regarding claim 11, Pederson discloses the claimed invention, explained above. In addition, Pederson discloses the light generators/emitters are electrically connected to the power source (e.g., columns 46-47, lines 55-10; "... If motion of the first alley light 800 is not desired, then stationary positioning of LED light sources 784 relative to

Application/Control Number: 10/519,786

Art Unit: 2885

housing 780 may be provided with suitable electrical connection to a vehicle power source") by means of a rotating distributor.

Regarding claim 12, Pederson discloses the claimed invention, explained above. In addition, Pederson discloses the drive means (e.g., 794) comprise at least one electric motor.

Regarding claim 13, (e.g., columns 46-47, lines 55-10; "... a culminator reflector 802 for reflection and maximization of light transmission along a desired path of illumination") the ray generators/emitters directed upwards (e.g., Figures 61-62; columns 46-47, lines 55-10; "... a culminator reflector 802 for reflection and maximization of light transmission along a desired path of illumination").

Regarding claim 14, (e.g., columns 46-47, lines 55-10; "... a culminator reflector 802 for reflection and maximization of light transmission along a desired path of illumination") non-coherent light signaling means (e.g., 612, 470, 444, 434; Figures 40, 41, 42, 44, 51, and 66) provided with a rotating dish are housed in the revolving element.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Stanuch et al. (USPN 5,097,397) – non-linear signaling device for vehicles

Beghelli (USPN 6,142,649) – emergency lighting fixture, especially for industrial environments

Application/Control Number: 10/519,786 Page 8

Art Unit: 2885

Hutchissson (USPN 5,517,388) – rotating light beacon including low-profile stepper motor

Smith (USPN 3,784,809) – emergency rotating warning lamp

J. S. McRea (USPN 2,814,029) – rotary beam warning light

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jacob Y Choi Examiner Art Unit 2885 Application/Control Number: 10/519,786

Art Unit: 2885

JC

Page 9

July a: